

Table 4–54. Future Potential Risks Under the No Action Alternative

Overall Summary for All Receptors and Pathways (No Action) ^a							
	Added Cancer (Unitless Probability)				Noncarcinogenic Risks (HI)		Notes
	Chemical		Radionuclides				
Receptor	CT	RME	CT	RME	CT	RME	
Resident							Assumes clean, municipal source of domestic water
Adult	9.50×10^{-4}	2.45×10^{-3}	NA	NA	2.91	16.91	
Child	3.02×10^{-4}	7.70×10^{-4}			3.51	19.91	
Rafter							Assumes 1 day of exposure per year
Child	7.51×10^{-9}	9.38×10^{-9}	1.19×10^{-8}	1.48×10^{-8}	0.01	0.02	Exposure would be from child play in contaminated soil and water
Camper							Assumes 1 day of exposure per year
Adult	6.53×10^{-8}	8.16×10^{-6}	3.33×10^{-7}	5.94×10^{-7}	0.16	0.28	Exposure would be from child play in contaminated soil and water
Child	1.12×10^{-7}	2.55×10^{-7}	1.82×10^{-7}	4.09×10^{-7}	0.19	0.43	
Outside Worker							Assumes clean, municipal source of domestic water
Adult	1.36×10^{-7}	1.01×10^{-6}	NA	NA	0.03	0.09	
Dose Assessment							
Resident					CT	RME	
Deterministic dose (with radon) (mrem/yr)					335	434	House built over contaminated soils northeast of the tailings pile
Risk at year 0 (with radon) (unitless probability)					7.0×10^{-4}	1.4×10^{-3}	
Deterministic dose (without radon) (mrem/yr)					57	88	
Risk at year 0 (without radon) (unitless probability)					2.1×10^{-4}	3.4×10^{-4}	
Rafter							
Deterministic dose (with radon) (mrem/yr)					1.8×10^{-3}	4.7×10^{-3}	
Risk at year 0 (with radon) (unitless probability)					1.2×10^{-9}	2.5×10^{-9}	
Deterministic dose (without radon) (mrem/yr)					1.7×10^{-3}	4.6×10^{-3}	
Risk at year 0 (without radon) (unitless probability)					9.8×10^{-10}	2.3×10^{-9}	
Total risks from radionuclides (includes surface water and radon)					1.2×10^{-9}	2.5×10^{-9}	
Total risks from radionuclides (no radon but includes surface water)					9.8×10^{-10}	2.3×10^{-9}	
Camper							
Deterministic dose (with radon) (mrem/yr)					0.035	0.081	
Risk at year 0 (with radon) (unitless probability)					2.6×10^{-8}	5.7×10^{-8}	
Deterministic dose (without radon) (mrem/yr)					0.035	0.081	
Risk at year 0 (without radon) (unitless probability)					2.6×10^{-8}	5.6×10^{-8}	
Total risks from radionuclides (includes surface water and radon)					2.6×10^{-8}	5.7×10^{-8}	
Total risks from radionuclides (no radon but includes surface water)					2.6×10^{-8}	5.6×10^{-8}	
Outside Worker							
Deterministic dose (with radon) (mrem/yr)					67	105.4	
Risk at year 0 (with radon) (unitless probability)					2.7×10^{-4}	1.1×10^{-3}	
Deterministic dose (without radon) (mrem/yr)					37	28	
Risk at year 0 (without radon) (unitless probability)					1.9×10^{-4}	3.7×10^{-4}	

^aSee Appendix D for additional details on the assumptions and calculation methods used to estimate the risks.
Note: HI = Hazard Index, CT = central tendency, RME = reasonable maximum exposure.